

Efektifitas Penggunaan Jenis Larutan Perendam Dan Lama Perendaman Terhadap Perkecambahan Benih Padi Inpari 33 (*Oryza sativa* L.)(The Effectiveness of Solution Types and Duration of Soaking on Viability of Rice Seed (*Oryza sativa* L.). Supervised by : Dr.Ir Rahmat Ali Syahban, Msi and Neetha Elina, SP

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ABSTRACT

Rice is the main crop commodity in Indonesia. Rice seed has primer dormancy type because of physically and physiologically that must be removed in order to quickly germinate. The effort to break the dormancy is by soaking in hot water and KNO₃ solution. This research aims to determine the effective way to break the rice seed dormancy. This research was conduted in October until December 2018 at Laboratory of BPSB Satgas II at Raya Ponororo Street No.132 Geger, Madiun Regency. This research was applied Completely Randomized Design with 2 factors. The first factor was type of solution with 2 levels there were KNO₃ 3% solution (L1) and water with temperature of 5°C (L2). The second factor was duration of soaking with 3 levels, there were 24 hours (P1), 36 hours (P2) and 48 hours (P3).The data was analyzed by f Test (ANOVA) and followed by BNT 5%. The result of this research shows that utilize of KNO₃ 3% (L1),is the best treatment for viability 92,67%, growth speed 13,57% and growth simultaneously 80,92%. Duration of soaking 48 hours (P3) on the highest value of viability of 93,63%, growth speed of 13,97% and growth simultaneously of 81, 00%. There is an interaction between KNO₃ 3% solution and duration of soaking 48 hours (L1P3) on seed viability of 96,25%, however it is non significant on growth simultaneously and growth speed

Key words : *Dormancy Breaking, Duration of Soaking, Hot Water, KNO₃ Solution*